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CLAIM LISTING:

This listing of claims will replace all prior versions, and listings, of claims in the application. Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer to the claimed and/or disclosed subject matter, and the assignee reserves the right to claim this subject matter and/or other disclosed subject matter in a continuing application.

Claim 1. (Currently amended) A method comprising:

between a source and a destination, pre-arranging between a source and a destination one or more internet connected nodes to transmit a signal from a first node to a second node without a buffering delay and/or a route computation delay for at least one or more predetermined time periods[[,]];

establishing in order to establish a virtual time multiplexed circuit a connection between said source and said destination along the pre-arranged one or more internet connected nodes, at least in part, to enable bi-directional data communication between said source and said destination;

interleaving one or more signals; and

transmitting the interleaved one or more signals along said connection:

wherein a particular one of the one or more predetermined time periods is determined based at least in part on a transmission link bandwidth of a particular node.

Claim 2. (Canceled).

Claim 3. (Currently Amended) A system comprising:

a virtual dedicated communication path comprising one or more internet connected nodes, wherein the one or more nodes may be are capable of being pre-arranged, for one or more periods of time, to transmit a signal from a first node to a second node without a buffering delay and/or a route calculation delay, wherein a particular one of said one or more respective periods of time is determined based at least in part on a transmission link bandwidth of a particular one of the one or more nodes, and wherein said signal comprises one or more multiplexed signals from said source and/or said destination.

Claim 4. (Previously Presented) The system of claim 3, wherein said virtual dedicated communication path comprises a first unidirectional virtual dedicated circuit and a second unidirectional virtual dedicated circuit.

Claim 5. (Previously Presented) The system of claim 4, wherein at least one of the unidirectional virtual dedicated circuits is active for a period of time.

Claim 6 (Currently Amended) A system comprising:

a connection manager capable of connecting a source and a destination at least in part by designating one or more internet connected nodes for transmitting a signal from a first node to a second node without a buffering delay and/or a route calculation delay, at least in part by designating the one or more nodes for transmitting said signal for one or more periods of time, wherein a particular one of the one or more periods of time is determined based at least in part on a transmission link bandwidth of a particular one of the one or more nodes, and wherein said signal comprises one or more multiplexed signals from said source and/or said destination.

Claim 7 (Currently amended) The system of claim 6, wherein the designated one or more internet connected-nodes comprise a first unidirectional virtual dedicated circuit and a second unidirectional virtual dedicated circuit.

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Claim 8. (Previously Presented) The system of claim 7, wherein at least one of the unidirectional virtual dedicated circuits is active for a period of time.

Claim 9. (New) The system of claim 6, wherein said signal further comprises multiplexed data from another source at one or more of the designated one or more nodes.

Claim 10. (New) The method of claim 1, and further comprising interleaving data from another source at one or more of said pre-arranged nodes.

Claim 11. (New) The method of claim 1, wherein said connection comprises a first unidirectional virtual dedicated circuit and a second unidirectional virtual dedicated circuit.

Claim 12. (New) The system of claim 3, wherein said signal further comprises multiplexed data from another source at one or more of the one or more pre-arranged nodes.